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PATENT  
Attorney Docket No. 501094

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

James J. Barnat et al.

Application No: 09/873,800

Filed: June 4, 2001

For: ROADWAY PAVING SYSTEM AND  
METHOD INCLUDING ROADWAY  
PAVING VEHICLE SUPPLY TRUCK

Group Art Unit: 3671

Examiner: Raymond W. Addie

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**GROUP 3600**

**DECLARATION UNDER 37 CFR §132**

1. I am employed as a product engineering manager at Etnyre & Company and am one of the inventors of the present patent application. I have over 25 years of work experience relating to the design and development of asphalt distributors, paving equipment and other types of heavy roadway equipment. In this regard, I am a named inventor on a number of different issued patents, including: U.S. Patent No. 5,478,147 entitled "Portable Mixer For mixing Ground Rubber Into Liquid Asphalt"; U.S. Patent No. 5,895,173 entitled "Roadway Paving Apparatus"; U.S. Patent No. 5,934,862 entitled "Conveyor Mechanism"; U.S. Patent No. 5,964,410 entitled "Method And Apparatus Of Uniform Nozzle Liquid Application By Way Of Vehicle"; U.S. Patent No. 6,119,961 entitled "Asphalt Strainer For An Asphalt Distributor"; U.S. Patent No. 6,161,775 entitled "Feedline Assembly And Asphalt Recirculation System For An Asphalt Distributor"; and U.S. Patent No. 6,186,732 entitled "Conveyor Mechanism".

2. I have reviewed the Office Action and the teachings of Bense et al. (U.S. Patent No. 5,895,173) and Kilheffer et al. (U.S. Patent No. 5,590,976) as cited by the Patent Examiner. Bense et. al and Kilheffer et al. both appear to relate to dressed aggregate applications where binder and aggregates are mixed in the paving vehicle or otherwise at an upstream location prior to discharge.

3. I am one of the inventors of O'Brien et al. (U.S. Patent No. 5,895,173) which was also cited by the Patent Examiner and am familiar with the teachings of O'Brien et al.. Unlike either Bense et al. and Kilheffer et al., the disclosure of O'Brien et al. relates to undressed aggregate applications (i.e. chipsealing) in which binder and aggregate are not mixed prior to discharge.

4. With respect to claim 47, I understand that the Patent Examiner has taken the position in the Office Action that "it would have been obvious to one of ordinary skill in the art, to provide the paving apparatus of O'Brien et al. with a refill system , as taught by Kilheffer et al., in order to perform continuous paving applications". I believe this reasoning is incorrect due to significantly different design considerations for undressed aggregate applications and dressed aggregate applications.

5. The purpose of my affidavit is to summarize and generalize some of the differences in design considerations between dressed aggregate applications and undressed aggregate applications, which I believe evidence why a continuous chipsealing system set forth in claim 47 is not taught or suggested by the asserted combination of the prior art.

6. One significant difference in design considerations is vehicle speed. Chipsealing operations typically operate at an average speed of about 3 times as fast as dressed aggregate applications. As a result, refilling in chipsealing applications is typically accomplished while the vehicles are stopped. The commercial chipsealing process commonly employed today also uses separate asphalt binder and chipspreader vehicles which are separately refilled.

7. The material supply considerations are also different for dressed aggregate applications and chipsealing applications. There are three different materials typically used in dressed aggregate applications, including large rock material, small rock material (e.g. sand) and oil binder. In contrast, chipsealing typically only uses two materials including a binder material and a single aggregate material.

8. In dressed aggregate applications, the more dressed aggregate (ie. mixed aggregate and binder) is conveyed and transported, the more likely the big rock and little rock tend to segregate, which can create an uneven surface. In chipsealing operations, uniformity of spraying and the uniformity of aggregate chip discharge is used to achieve a uniform surface result.

9. Dressed aggregate applications dump stiff aggregate upon the ground as the binder material is already mixed with the aggregate materials prior to discharge. This requires spreaders and evening out devices. In contrast, chipsealing involves free flowing aggregate which is controllably dumped about 1 stone thick over the surface.

**Declaration Statement**

In re Appln. of James J. Barnat et al.  
Application No. 09/873,800

As a person signing below:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

  
Patrick O'Brien

Dated: Nov 12, 2002